Lindsay-Strathmore Irrigation District
Water Management Plan
2009

4/27/10

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Section 1: Description of the District

District Name: Lindsay-Strathmore I.D.

Contact Name: Scott A. Edwards

Title: Manager

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Web Address

A. History

1. Date district formed: 10/16/1915 *Date of first Reclamation contract*: 8/5/48
Original size (acres): 15,700 *Current year (last complete calendar year)*: 2009

2. Current size, population, and irrigated acres

	(enter data year)
Size (acres)	15,700
Population served	1,510
Irrigated acres	15,123

3. Water supplies received in current year

Water Source	*AF*
Federal urban water (Tbl 1)	
Federal agricultural water (Tbl 1)	17,317
State water (Tbl 1)	
Other Wholesaler (define) (Tbl 1)	
Local surface water (Tbl 1)	6384
Upslope drain water (Tbl 1)	
District ground water (Tbl 2)	
Banked water (Tbl 1)	
Transferred water (Tbl 6)	
Recycled water (Tbl 3)	
Other (define) (Tbl 1)	
Total	23,701

4. Annual entitlement under each right and/or contract

	AF	*Source*	*Contract #*	*Availability period(s)*
Reclamation Urban AF/Y				
Reclamation Agriculture AF/Y	27,500	CVP	IIr-1514-LTR1	Annually
Other AF/Y	18,000	Wutchumna Water Co.		Annually
Other AF/Y				

5. Anticipated land-use changes
None

6. Cropping patterns (Agricultural only)

List of current crops (crops with 5% or less of total acreage) can be combined in the 'Other' category.

Original Plan (enter date)		*Previous Plan 2002*		*Current Plan - 2009*	
Crop Name	*Acres*	*Crop Name*	*Acres*	*Crop Name*	*Acres*
		Oranges	9,750	Oranges	9,502
		Olives	1,620	Olives	1,193
		Other	1,330	Other	4,428
				(other)	See crop report attached
Other (<5%)		*Other (<5%)*		*Other (<5%)*	
Total		*Total*	12,700	*Total*	15,123

7. Major irrigation methods (by acreage) (Agricultural only)

Original Plan (enter date)		*Previous Plan (enter date)*		*Current Plan*	
Irrigation Method	*Acres*	*Irrigation Method*	*Acres*	*Irrigation Method*	*Acres*
		Solid Set	12,573	Solid Set	13,400
		Other	273	Other	1,723
Other		*Other*		*Other*	
Total		*Total*	12,700	*Total*	15,123

B. Location and Facilities

See Attachment A – District Facilities Map

1. Incoming flow locations and measurement methods

Location Name	*Physical Location*	*Type of Measurement Device*	*Accuracy*
District turnout	Friant-Kern Canal Milepost 85.56		
Main Pumping Plant		Venturi (-4)	+/- 6%
High-Level Pressure Zone		centrifugal pumps (2)	+/- 6%
El Mirador Pressure Zone		centrifugal pumps (2)	+/- 6%

2. 2009 Agricultural Conveyance System

Miles Unlined - Canal	*Miles Lined - Canal*	*Miles Piped*	*Miles - Other*
		115	

3 2009 Urban Distribution System- N/A

Miles AC Pipe	*Miles Steel Pipe*	*Miles Cast Iron Pipe*	*Miles - Other*

4. Storage facilities (tanks, reservoirs, regulating reservoirs)

Name	*Type*	*Capacity (AF)*	*Distribution or Spill*
Main Zone reservoir	Regulating reservoir	80	
High-Level reservoir	Regulating reservoir	5	
El Mirador Reservoir	steel tank	20,000 (GAL)	

5. Outflow locations and measurement methods (Agricultural only)
No outflow from the District

6. Description of the agricultural spill recovery system
Closed system. Recovery of any surface tailwater is the responsibility of farm operators.

7. Agricultural delivery system operation (check all that apply)

On-demand	*Scheduled*	*Rotation*	*Other (describe)*
X- as ordered	X- 24 hr. notice		

The distribution system is capable of delivery on demand. The District requires the landowner call the day before delivery.

8. Restrictions on water source(s)- None

Source	*Restriction*	*Cause of Restriction*	*Effect on Operations*

There are no restrictions at this time on the District's water sources.

9. Proposed changes or additions to facilities and operations for the next 5 years
None proposed at this time.

C. Topography and Soils

1. Topography of the district and its impact on water operations and management
The District is approximately 9 miles long at north and south and approximately 5-1/2 miles wide at east and west extremes. The District is situated at the base of the Sierra Nevada on the east side of the San Joaquin Valley, the eastern boundary being at elevation 719 feet above sea level and sloping to 355 feet above sea level on the western boundary at from 15-20 feet per mile to 5 feet per mile. There are no impacts from topography on the District's water supply.

2. District soil association map (Agricultural only)
See Attachment B, District Soils Map

3. Agricultural limitations resulting from soil problems (Agricultural only)

Soil Problem	*Estimated Acres*	*Effect on Water Operations and Management*
Salinity		None
High-water table		None
High or low infiltration rates		None
Other (define)		None

D. Climate

1. General climate of the district service area

	Jan	*Feb*	*Mar*	*Apr*	*May*	*Jun*	*Jul*	*Aug*	*Sep*	*Oct*	*Nov*	*Dec*	*Annual*
Avg Precip.													
Total Precip.	1.73	1.81	0.44	0.66	0.43	0	0	0	0	1.04	0.27	2.18	8.56
Avg Temp.	47	49.9	54.2	60.4	74	74.9	83	79.2	76.2	60.8	52.2	45.6	63.1
Max. Temp.	59	61.6	68.2	75.2	88.9	88.4	99.6	95.6	93.3	74.9	67.2	56.7	77.4
Min. Temp	37.9	39.1	39.7	44.4	56.4	59.8	64.7	62.2	60.7	47.6	40.2	36.4	49.1
ETo	1.22	1.59	3.84	5.35	7.48	7.59	8.89	7.49	5.67	3.32	1.92	1.1	55.46

Weather station ID Lindcove #86 *Data period: Year* 5-31-89 *to Year* 2009

Average wind velocity 5 mph *Average annual frost-free days:* 320

2. Impact of microclimates on water management within the service area
There are no microclimates within the District.

E. Natural and Cultural Resources

1. Natural resource areas within the service area- None

Name	*Estimated Acres*	*Description*

2. Description of district management of these resources in the past or present
None required

3. Recreational and/or cultural resources areas within the service area

Name	*Estimated Acres*	*Description*
		There are no known cultural or recreational resources within the District.

F. Operating Rules and Regulations

1. Operating rules and regulations

The District Rules and Regulations are attached in Attachment C.

2. Water allocation policy (Agricultural only)
See Attachment C
Summary -
The District allocation policy is unrestricted use during normal years.

3. Official and actual lead times necessary for water orders and shut-off (Agricultural only)
See Attachment C
Summary -
Water orders must be placed the day before turn-on. Turn-offs are given when the irrigation is completed.

4. Policies regarding return flows (surface and subsurface drainage from farms) and outflow (Agricultural only)
See Attachment C
Summary -
The District delivery system and landowner irrigation systems make return flow systems unnecessary

5. Policies on water transfers by the district and its customers
See Attachment C
Summary –
The District policy regarding in-District transfers is unrestricted. Transfers between Districts are made according to the current Friant Unit Water Policy - USBR. Transfers to outside the District by individuals are prohibited.

G. Water Measurement, Pricing, and Billing

1. Agricultural Customers

a. Number of farms 650

b. Number of delivery points (turnouts and connections) 1000

c. Number of delivery points serving more than one farm 150

d. Number of measured delivery points (meters and measurement devices) 1000

e. Percentage of delivered water that was measured at a delivery point 100%

f. Delivery point measurement device table (Agricultural only)

Measurement Type	*Number*	*Accuracy (+/- %)*	*Reading Frequency (Days)*	*Calibration Frequency (Months)*	*Maintenance Frequency (Months)*
Orifices					
Propeller meter					
Weirs					
Flumes					
Venturi					
Metered gates					
Acoustic doppler					

Other (turbine)	1000	4%	Per irrigation	yearly	Repair as needed
Total					

2. Urban Customers

a. *Total number of connections* 200

b. Total number of metered connections 200

c. Total number of connections not billed by quantity 0

d. Percentage of water that was measured at delivery point 100%

e. Percentage of delivered water that was billed by quantity 100%

f. Measurement device table

Meter Size and Type	*Number*	*Accuracy (+/-percentage)*	*Reading Frequency (Days)*	*Calibration Frequency (Months)*	*Maintenance Frequency (Months)*
5/8-3/4"					
1"					
1 ½"					
2"					
3"					
4"					
6"					
8"					
10"					
Compound					
Turbo	200	2%	Bi-monthly	yearly	Replace as needed
Other (define)					
Total					

3. Agriculture and Urban Customers

a. Current year agriculture and /or urban water charges - including rate structures and billing frequency

Ag =	Urban
$97.50/AF – Basic	$234.00/AF – Basic
$100.50/ AF – 2nd Tier	$252.00/AF – High Level
$125.50/ AF – 3rd Tier	$279.00/AF – El Mirador zone
Billed monthly	Billed bi-monthly

b. Annual charges collected from customers (current year data)

Fixed Charges			
Charges ($ unit)	*Charge units ($/acre), ($/customer) etc.*	*Units billed during year (acres, customer) etc.*	*$ collected ($ times units)*

Volumetric charges			
Charges ($ unit)	*Charge units ($/AF), ($/HCF), etc.*	*Units billed during year (AF, HCF) etc.*	*$ collected ($ times units)*
$97.50	Regular $/AF		
$100.50	Regular $/AF		
$124.50	Regular $/AF		
$234.00	Continuous $/AF		
$252.00	Continuous $/AF		
$279.00	Continuous $/AF		

c. Water-use data accounting procedures

The District's water usage and billing records are kept on three interconnected PC's. The system was installed in 2003 and utilizes custom written software. All records, including water use data and customer water use by meter is available. Computer water use data is available from 1988 to date.

H. Water Shortage Allocation Policies

1. Current year water shortage policies or shortage response plan - specifying how reduced water supplies are allocated

The District's water shortage allocation policies are contained in the District Rules and Regulations in Appendix C under Rule 3(a). Domestic water is given priority over irrigation water and is not allocated unless the initial amount of water available for the year is less than 1500 acre-feet. Irrigation water is allocated only to those lands served by irrigation meters and is apportioned according to the number of assessed acres.

2. Current year policies that address wasteful use of water and enforcement methods

Waste of water is addressed by District Rule 6. The District does not allow water to run off of irrigated land and the meter will be locked until a situation resulting in runoff is corrected.

Section 2: Inventory of Water Resources

A. Surface Water Supply

1. Acre-foot amounts of surface water delivered to the water purveyor by each of the purveyor's sources

See Water Inventory Tables, Table 1

The District's water supply consists of Long-Term Water Service Contract No. Ilr-1514-LTR1, amended January 19, 2007, for an annual delivery of 27,500 acre-feet. The District usually obtains a Section 215 water contract in order to access excess runoff when available. The District also owns a pre-1914 right of 21 shares of Wutchumna Water Company stock, granting the District an entitlement of the Kaweah River of approximately 5,000 - 14,000 acre-feet per year. The District can transport this water to the District through a Warren Act contract on a yearly basis.

2. Amount of water delivered to the district by each of the district sources for the last 10 years

See Water Inventory Tables, Table 8

B. Ground Water Supply

1. Acre-foot amounts of ground water pumped and delivered by the district

See Water Inventory Tables, Table 2

The District operates 4 groundwater wells with a nominal production of 1820 GPM. These wells are not utilized if surface water is available due to the extremely high cost of pumping into a pressurized system and bad water quality. The District operated wells are as follows:

Name	Pumping Capacity	Spring Depth	Fall Depth
So. Lindsay	500 GPM	30 ft.	42ft.
No. Sec 8	292 GPM	13 ft.	17 ft.
So. Sec 8	450 GPM	13 ft.	26 ft.
Stark	578 GPM	No measurement taken.	

2. Ground water basin(s) that underlies the service area

No usable groundwater basin underlies the District. The District lies too far east against the foothills to be influenced by either the Kaweah or Tule Rivers.

Name	*Size (Square Miles)*	*Usable Capacity (AF)*	*Safe Yield (AF/Y)*

3. Map of district-operated wells

See Attachment A, District Facilities Map

4. Description of conjunctive use of surface and ground water

The District operates no groundwater recharge areas. The District does not have a conjunctive use program within the District boundaries. The soils of the District are mostly adobe underlayed with hardpan and are not conducive to recharge because of the very small infiltration rates. However, the District contractually utilizes the conjunctive use capacity of the Tulare Irrigation District (TID), a common stockholder in the Wutchumna Water Company, by delivering the District's Kaweah River water through the Wutchumna Ditch to the Tulare Irrigation District turnout. TID either utilizes this water for irrigation (in lieu recharge) or direct sinking in their groundwater recharge basins. TID farmers realize the benefit of reduced pumping depths. During drought situations, TID farmers utilize the groundwater delivered by Lindsay-Strathmore Irrigation District. TID returns surface water to LSID through either CVP facilities or through the Kaweah River system.

The District utilizes District groundwater pumps during those times when the Friant-Kern Canal is dewatered. This is usually during the winter months when there is no irrigation demand. Therefore, District wells are used to serve only the homesteads and residences in the District. There is no extraction of principally groundwater for irrigation purposes although the District will run its groundwater pumps during times of drought to supplement the surface supply.

The Board of Directors has adopted a resolution on intent under AB 3030. A District map showing the location of the District owned wells is in Appendix A.

5. Ground Water Management Plan
See Attachment F, Ground Water Management Plan

6. Ground Water Banking Plan
See Attachment G, Ground Water Banking Plan, if applicable

C. Other Water Supplies

1. "Other" water used as part of the water supply
See the Water Inventory Tables, Table 1

D. Source Water Quality Monitoring Practices

1. Potable Water Quality (Urban only)

Surface water never meets State and Federal drinking water turbidity standards because the water is not filtered, only chlorinated and therefore cannot be called treated water. The District must notify users that water does not meet State and Federal drinking water standards in this regard. Groundwater never meets State and Federal drinking water nitrate standards. The District must notify users that water does not meet State and Federal drinking water standards in this regard.

2. Agricultural water quality concerns: *Yes* _____ *No* X

The District monitors both surface and groundwater as directed by the California Department of Health Services for the following constituents:

General mineral
General physical
Inorganic chemicals
Regulated organic chemicals
Gross Alpha
Other organics
Other Inorganics
Turbidity
Bacteriological contaminants

3. Description of the agricultural water quality testing program and the role of each participant, including the district, in the program
Water Source is Friant-Kern Canal Quality tests are available from the Friant-Kern Water Authority.

4. *Current water quality monitoring programs for surface water by source (Agricultural only)*

Analyses Performed	*Frequency*	*Concentration Range*	*Average*
Ag Suitability	Yearly		
-Friant–Kern Canal-			

Current water quality monitoring programs for groundwater by source (Agricultural only)

Analyses Performed	*Frequency*	*Concentration Range*	*Average*
Not Sampled			
-no Ag use			

E. Water Uses within the District

1. Agricultural

See Water Inventory Tables, Table 5 - Crop Water Needs

Of the 12,700 acres irrigated in the District, all (including 9,750 acres of oranges and 1,620 acres of olives) are irrigated with microjet and fanjet solid set sprinklers. Crop ET requirements are 2.44 AF/acre and there are no leaching water requirements to move harmful constituents from the root zone.

2. Types of irrigation systems used for each crop in current year

Crop name	*Total Acres*	*Level Basin - acres*	*Furrow - acres*	*Sprinkler - acres*	*Low Volume - acres*	*Multiple methods - acres*
Oranges	9,502			9,502		
Olives	1,193			1,193		

3. Urban use by customer type in current year

Customer Type	*Number of Connections*	*AF*
Single-family		
Multi-family		
Commercial		
Industrial		
Institutional		
Landscape irrigation		

Customer Type	*Number of Connections*	*AF*
Wholesale		
Recycled		
Other (Ranch M&I)	200	405
Other (specify)		
Other (specify)		
Unaccounted for		
Total	200	405

4. Urban Wastewater Collection/Treatment Systems serving the service area – current year

Treatment Plant	*Treatment Level (1, 2, 3)*	*AF*	*Disposal to / uses*
None			
	Total		
Total discharged to ocean and/or saline sink			

5. Ground water recharge/management in current year (Table 6)

Recharge Area	*Method of Recharge*	*AF*	*Method of Retrieval*
None			
	Total		

6. Transfers and exchanges into or out of the service area in current year (Table 6)

From Whom	*To Whom*	*AF*	*Use*
LSID	SPUD	20	Ag irrigation
LSID	SPUD	35	Ag irrigation
LSID	SPUD	46	Ag irrigation
LSID	RGWD	467	Ag irrigation
LSID	SPUD	60	Ag irrigation
LSID	RGWD	1651	Ag irrigation
LSID	SPUD	66	Ag irrigation
LSID	RGWD	1850	Ag irrigation
TID		2800	Ag irrigation
LSID	SPUD	65	Ag irrigation
LSID	RGWD	32	Ag irrigation
LSID	SPUD	53	Ag irrigation
LSID	HVID	500	Ag irrigation
LSID	SPUD	35	Ag irrigation
LSID	SPUD	27	Ag irrigation
LSID	SPUD	17	Ag irrigation

The District makes annual and routine transfers to several Friant districts. The 2008 transfers, exchanges, sales or rescheduled water is listed above. All water was LSID Friant Class 1 water.

7. Trades, wheeling, wet/dry year exchanges, banking or other transactions in current year (Table 6)

From Whom	*To Whom*	*AF*	*Use*
None			

8. Other uses of water in current year

Other Uses	*AF*
None	

F. Outflow from the District (Agricultural only)

Districts included in the drainage problem area, as identified in "A Management Plan for Agricultural Subsurface Drainage and Related Problems on the Westside San Joaquin Valley (September 1990)," should also complete Water Inventory Table 7 and Appendix B (include in plan as Attachment L)

There are no outflows from the District as a result of irrigation practices. Irrigation water is retained on the land to which it is applied and within District boundaries. The District is not in a drainage problem area.

1. Surface and subsurface drain/outflow in current year

Outflow point	*Location description*	*AF*	*Type of measurement*	*Accuracy (%)*	*% of total outflow*	*Acres drained*
	None					

Outflow point	*Where the outflow goes (drain, river or other location)*	*Type Reuse (if known)*
	None	

2. Description of the Outflow (surface and subsurface) water quality testing program and the role of each participant in the program - No outflow

3. Outflow (surface drainage & spill) Quality Testing Program

Analyses Performed	*Frequency*	*Concentration Range*	*Average*	*Reuse limitation?*
None				

Outflow (subsurface drainage) Quality Testing Program

Analyses Performed	*Frequency*	*Concentration Range*	*Average*	*Reuse limitation?*
None				

4. Provide a brief discussion of the District's involvement in Central Valley Regional Water Quality Control Board programs or requirements for remediating or monitoring any contaminants that would significantly degrade water quality in the receiving surface waters.

District is a closed system, no contaminants leave the District.

G. Water Accounting (Inventory)

1. Water Supplies Quantified

All surface water, groundwater and precipitation supplies are recorded in Tables 1, 2 and 3.

a. Surface water supplies, imported and originating within the service area, by month (Table 1)
b. Ground water extracted by the district, by month (Table 2)
c. Effective precipitation by crop (Table 5)
d. Estimated annual ground water extracted by non-district parties (Table 2)
e. Recycled urban wastewater, by month (Table 3)
f. Other supplies, by month (Table 1)

2. Water Used Quantified

All uses of water within the District are recorded in Tables 4, 5, 6 and 7.

a. Agricultural conveyance losses, including seepage, evaporation, and operational spills in canal systems (Table 4) or
Urban leaks, breaks and flushing/fire uses in piped systems (Table 4)
b. Consumptive use by riparian vegetation or environmental use (Table 6)
c. Applied irrigation water - crop ET, water used for leaching/cultural practices (e.g., frost protection, soil reclamation, etc.) (Table 5)
d. Urban water use (Table 6)
e. Ground water recharge (Table 6)
f. Water exchanges and transfers and out-of-district banking (Table 6)

g. Estimated deep percolation within the service area (Table 6)
h. Flows to perched water table or saline sink (Table 7)
i. Outflow water leaving the district (Table 6)
j. Other

3. Overall Water Inventory

The comparison between total water supplies entering the District with total water leaving the District is contained in Table 6.

a. Table 6

H. Assess Quantifiable Objectives:

There are no Quantifiable Objectives listed for the District's area. The District current measures all water entering the District's distribution system by twin ventui meters owned by the US Bureau of Reclamation. The meters are regularly serviced. The District's agricultural turnouts are metered and are read both before and after every irrigation order.

Identify the Quantifiable Objectives that apply to the District (Planner, chapter 10) and provide a short narrative describing past, present and future plans that address the CALFED Water Use Efficiency Program goals identified for the District.

QO #	*QO Description*	*Past, Present & Future Plans*
183	Salt sink impacts	No flows leave District for any impacts
186	Water supply flexibility to Pixley	No diversion or connection to Pixley WA
187	Diversion activity that would affect lands with salt problems	No flows leave District for any impact on downstream salty lands

Section 3: Best Management Practices (BMPs) for Agricultural Contractors

A. Critical Agricultural BMPs

1. *Measure the volume of water delivered by the district to each turnout with devices that are operated and maintained to a reasonable degree of accuracy, under most conditions, to +/- 6%*

100% of all customers, ag and domestic, are metered. The new turbine meters used are accurate to within 2% from the factory. A total of 1000 ag customers and 200 domestic customers are connected to the system.

Number of turnouts that are unmeasured or do not meet the standards listed above: 0

Number of measurement devices installed last year: 40

Number of measurement devices installed this year: 30

Number of measurement devices to be installed next year: 30

Types of Measurement Devices Being Installed	*Accuracy*	*Total Installed During Current Year*
Turbine type	+/- 2%	30

2. *Designate a water conservation coordinator to develop and implement the Plan and develop progress reports*

Name: Scott A. Edwards *Title:* General Manager

Address: P.O. Box 846, Lindsay, CA. 93247
Telephone: (559) 562-2581 *E-mail:* sae16@lsid.org

3. *Provide or* **support** *the availability of water management services to water users*

a. On-Farm Evaluations

Private mobile lab services. Individual farms sign-up for these services. District **supports** the evaluations. North West Kern RCD provides services in area. Table data is their estimates.

1) On farm irrigation and drainage system evaluations using a mobile lab type assessment

	Total in district	*# surveyed last year*	*# surveyed in current year*	*# projected for next year*	*# projected 2nd yr in future*
Irrigated acres	15123				
Number of farms	650	3	4	0-4	0-5

2) Timely field and crop-specific water delivery information to the water user

The District supports several programs promoting efficient water usage, including the Tulare County Farm Bureau, Water Education Foundation, Association of California Water Agencies, all of whom disseminate educational materials to landowners, domestic users, schools and organizations. The District regularly assists private consultants in the design and installation of new irrigation systems. All information concerning the flow, pressure, elevation and pricing of irrigation water is routinely given to these private consultants to ensure that the system planned for the landowner is the most efficient possible. Testing of the finished system is also routinely assisted by the District.

There are approximately 650 individual farms within the District. There are presently approximately 1000 acres of citrus land being redeveloped, that is, the old grove has been removed and being replanted and a completely new irrigation system being installed. The flow characteristics and pressure gradient for these new systems is evaluated by the District and that information is used by the irrigation system designer.

For efficient irrigation water scheduling, the District maintains extensive computer data on each connection in the District. While the landowner is free to schedule water when he pleases, the historical data the District maintains is valuable to promote the efficient use of water. Per irrigation, monthly and seasonal usage records give valuable basis for scheduling irrigation water. The water usage data for each meter is available on request.

b. Real-time and normal irrigation scheduling and crop ET information

Evapo-transpiration (ET) information - Normal and real-time ET data for seven (7) local CIMIS stations are provided to the member districts on a weekly basis with the Water Data Report during the growing season. Crop coefficients, as developed by the Kings River Conservation District, are also provided in the same report. This information is available at the District office.

c. Surface, ground, and drainage water quantity and quality data provided to water users

Surface Water Quality - Surface water quality for water conveyed through the FKC from Friant Dam is now being analyzed on an annual basis and reported on the Friant Water Users water supply reports. The District also does extensive water quality monitoring of the Friant-Kern Canal water supply. This information is available to the District landowners and is mailed at least once annually to all District residents.

d. Agricultural water management educational programs and materials for farmers, staff, and the public

Program	*Co-Funders (If Any)*	*Yearly Targets*
CIMIS		All Users
Waterline	Fresno Water Authority	All Users
Center For Irrigation Technology	Fresno State	All Users

e. other

Friant Waterline - This monthly publication reports activities of interest to landowners within the Friant Unit. Water supply and use information is typically addressed with articles of conservation practices which are proven in the field.

Irrigation Tech-line - This educational water management newsletter is published approximately four (4) times per year. Articles typically feature grower success stories and a corresponding technical article (soil/water/plant) with each issue. The newsletter is distributed to those receiving the Friant Waterline.

The Friant Water Users Authority also maintains lists of (1) organizations providing loans, grants, and cost sharing, (2) organizations performing irrigation pump efficiency testing, (3) on-farm irrigation management consultants, (4) irrigation management software, and (5) sources of real-time CIMIS ET data. This information is available to all District landowners.

Grower Irrigation System Evaluation Rebate Program - The District Board has agreed to support irrigation system evaluations through a mobile lab program. The District sponsors a rebate program for growers to offset the cost of grower irrigation system evaluations to provide at least a 25% reduction in the cost of such evaluations. The District will fund the first 5% of growers requesting this service.

4. Pricing structure - based at least in part on quantity delivered

Describe the quantity-based water pricing structure, the cost per acre-foot.

The Districts current policy is that in order to maintain control of the system and to monitor water usage to every field, the landowner is required to order water for each irrigation. The meter is chained and padlocked between each irrigation. Therefore, for each irrigation order, the metertender has the opportunity to record the meter reading twice, once when opening the lock and once when locking the meter back up. Any problems with the meter or delivery system can be determined very quickly. The landowner has a record of each irrigation order and the usage during each irrigation. Additionally, the landowner is required to pay by the 15th of each month for the previous month's usage or no order for irrigation water will be accepted. Each of these practices encourages efficient use of water.

The District does offer a continuous rate for irrigation water. Under the continuous rate policy, the landowner is not required to order water for each irrigation but rather is allowed to open and close the meter at any time without notification to the District office. The billing cycle for continuous rate water is bi-monthly. The rates for regular and continuous rate water is listed below:

Zone	Regular	Continuous
Main	$97.50/AF	$234/AF
High-Level	$100.50/AF	$252/AF
El Mirador	$124.50/AF	$279/AF

The penalty for the less controlled continuous rate water is large. Strict control of water usage is encouraged by the large discrepancy between the two rates. As may be expected, nearly 100% of all landowners choose to use regular irrigation water to avoid large water bills and to maintain a record of water usage that is useful in planning irrigation schedules. A handful of landowners utilize the continuous rate water on nurseries and small herb acreages where water usage is daily.

The high cost of even the regular irrigation water encourages the use of efficient irrigation systems. 100% of the District is irrigated with sprinklers, mostly ultra low flow fanjet and microjet sprinklers. These sprinklers typically use between 5 and 13 gallons per hour.

5. Evaluate and describe the need for changes in policies of the institutions to which the district is subject

The District does not, at this time, see the need for any policy changes by any institution that has regulatory authority over the District .

6. Evaluate and improve efficiencies of district pumps

Describe the program to evaluate and improve the efficiencies of the contractor's pumps.

The District regularly maintains and services it pumps. All main pumps are epoxy coated for long life and efficiency. The District maintains a motor rewind program whereby all main pumps motors are serviced on a regular basis and are routinely rewound for efficiency. The District also utilizes a off-peak load pumping schedule to reduce electrical energy usage. The District also participates in a voluntary demand reduction program administered by Enernoc in conjunction with the Southern California Edison Company.

B. Exemptible BMPs for Agricultural Contractors

1. Facilitate alternative land use – No alternative land use in the District

Drainage Characteristic	*Acreage*	*Potential Alternate Uses*
High water table (<5 feet)		
Poor drainage		
Ground water Selenium concentration > 50 ppb		
Poor productivity		

Describe how the contractor encourages customers to participate in these programs.

2. Facilitate use of available recycled urban wastewater that otherwise would not be used beneficially, meets all health and safety criteria, and does not cause harm to crops or soils

Sources of Recycled Urban Waste Water	*AF/Y Available*	*AF/Y Currently Used in District*
None		

3. Facilitate the financing of capital improvements for on-farm irrigation systems

Funding source Programs	*How provide assistance*
See note below	

The District provides free meter maintenance and meter replacement, including the cost of equipment and installation labor, in its meter replacement program. In addition, pipeline installation to parcels not currently served is provided at cost to the landowner. The District has a program whereby District landowners can obtain grants from the District to improvement irrigation systems.

The Friant Water Users Authority has compiled and maintains a list, provided to the landowners, of the following:

1. Organizations providing loans, grants and cost sharing.
2. Organizations performing irrigation pump efficiency testing.
3. On-farm irrigation management consultants.
4. Irrigation management software.
5. Sources of real-time CIMIS ET data.

4. Incentive pricing

Structure of incentive pricing	*Related goal*
Main $97.50/AF (reg.)	Regular
Main $234/AF (cont.)	Continuous
High-Level $100.50/AF (reg.)	Regular, scheduled delivery
High-Level $252/AF (cont.)	Continuous

El Mirador $124.50/AF (reg.)	Regular, scheduled delivery
El Mirador $279/AF (cont.)	Continuous

The District's current policy is that in order to maintain control of the system and to monitor water usage to every field, the landowner is required to order water for each irrigation. The meter is chained and padlocked between each irrigation. Therefore, for each irrigation order, the metertender has the opportunity to record the meter reading twice, once when opening the lock and once when locking the meter back up. Any problems with the meter or delivery system can be determined very quickly. The landowner has a record of each irrigation order and the usage during each irrigation. Additionally, the landowner is required to pay by the 15th of each month for the previous month's usage or no order for irrigation water will be accepted. Each of these practices encourages efficient use of water.

The District does offer a continuous rate for irrigation water. Under the continuous rate policy, the landowner is not required to order water for each irrigation but rather is allowed to open and close the meter at any time without notification to the district office. The billing cycle for continuous rate water is bi-monthly.

The penalty for the less controlled continuous rate water is large. Strict control of water usage is encouraged by the large discrepancy between the two rates. As may be expected, nearly 100% of all landowners choose to use regular irrigation water to avoid large water bills and to maintain a record of water usage that is useful in planning irrigation schedules. A handful of landowners utilize the continuous rate water on nurseries and small herb acreages where water usage is daily.

The high cost of even the regular irrigation water encourages the use of efficient irrigation systems. 100% of the District is irrigated with sprinklers, mostly ultra low flow fanjet and microjet sprinklers. These sprinklers typically use between 5 and 13 gallons per hour.

5. a) Line or pipe ditches and canals

Canal/Lateral (Reach)	*Type of Improvement*	*Number of Miles in Reach*	*Estimated Seepage (AF/Y)*	*Accomplished/ Planned Date*
Pipe Line	Replacement	5		Completed 2009

The entire District distribution system is underground, pressurized pipe.

b) Construct regulatory reservoirs

Reservoir Name	*Annual Spill in Section (AF/Y)*	*Estimated Spill Recovery (AF/Y)*	*Accomplished/ Planned Date*
High Level Reservoir			Re-line-2010 /Prop 84 funds

6. Increase flexibility in water ordering by, and delivery to, water users

The District utilizes on-demand water scheduling, the most flexible possible scheduling

7. Construct and operate district spill and tailwater recovery systems

Distribution System Lateral	*Annual Spill (AF/Y)*	*Quantity Recovered and reused (AF/Y)*
No spill in District		
Total		

Drainage System Lateral	*Annual Drainage Outflow (AF/Y)*	*Quantity Recovered and reused (AF/Y)*
Total		

The District does not experience any operational spill.

8. Plan to measure outflow. The District has no spill outflow so there is no need to measure it.

Total # of outflow (surface) locations/points 0

Total # of outflow (subsurface) locations/points 0

Total # of measured outflow points 0

Percentage of total outflow (volume) measured during report year 0

Identify locations, prioritize, determine best measurement method/cost, submit funding proposal

Location & Priority	*Estimated cost (in $1,000s)*				
	2009	*2010*	*2011*	*2012*	*2013*

9. Optimize conjunctive use of surface and ground water

The District contractually utilizes the conjunctive use capacity of the Tulare Irrigation District (TID), a common stockholder in the Wutchumna Water Company, by delivering the District's Kaweah River water through the Wutchumna Ditch to the Tulare Irrigation District turnout. TID either utilizes this water for irrigation (in lieu recharge) or direct sinking in their groundwater recharge basins. TID farmers realize the benefit of reduced pumping depths. During drought situations, TID farmers utilize the groundwater delivered by Lindsay-Strathmore Irrigation District. TID returns surface water to LSID through either CVP facilities or through the Kaweah River system.

10. Automate canal structures

The District has no canal structures.

11. Facilitate or promote water customer pump testing and evaluation

There are very few landowner wells in use within the District. The District provides virtually 100% of the irrigation demand in the District. However, the District does coordinate private well pump testing through the Southern California Edison Company for those landowners requesting such testing.

12. Mapping

The District's distribution system is GIS mapped.

GIS maps	*Estimated cost (in $1,000s)*				
	2009	*2010*	*2011*	*2012*	*2013*
Layer 1 – Distribution system	complete				
Layer 2 – Drainage system	complete				
Suggested layers:					
Layer 3 – Ground water information	N/A				
Layer 4 – Soils map	complete				
Layer 5 – Natural & cultural resources	N/A				
Layer 6 – Problem areas	N/A				

C. Provide a 3-Year Budget for Implementing BMPs

1. Amount actually spent during current year (2009).

BMP #		*BMP Name*	*Actual Expenditure (not including staff time)*	*Staff Hours*
A	*1*	*Measurement*	*$19000*	*0*
	2	*Conservation staff*	*$1000*	*0*
	3	*On-farm evaluation /water delivery info*	*$0*	*0*
		Irrigation Scheduling	*$1500*	*0*
		Water quality	*$30000*	*0*
		Agricultural Education Program	*$1500*	*0*
	4	*Quantity pricing*	*$0*	*0*
	5	*Policy changes*	*$1000*	*0*
	6	*Contractor's pumps*	*$0*	*0*
B	*1*	*Alternative land use*	$0	0
	2	*Urban recycled water use*	$0	0
	3	*Financing of on-farm improvements*	$0	0
	4	*Incentive pricing*	$0	0
	5	*Line or pipe canals/install reservoirs*	$50000	0
	6	*Increase delivery flexibility*	$300000	0
	7	*District spill/tailwater recovery systems*	$0	0
	8	*Measure outflow*	*$0*	*0*
	9	*Optimize conjunctive use*	$50000	0
	10	*Automate canal structures*	$100000	0
	11	*Customer pump testing*	$0	0
	12	*Mapping*	$0	*0*
		Total	$554000	0

2. Projected budget summary for the next year (2010).

BMP #		BMP Name	Budgeted Expenditure (not including staff time)	Staff Hours
A	*1*	*Measurement*	*$20000*	*0*
	2	*Conservation staff*	*$1000*	*0*
	3	*On-farm evaluations/water delivery info*	*$500*	*0*
		Irrigation Scheduling	*$1500*	*0*
		Water quality	*$30000*	*0*
		Agricultural Education Program	*$1500*	*0*
	4	*Quantity pricing*	*$0*	*0*
	5	*Policy changes*	*$1000*	*0*
	6	*Contractor's pumps*	*$0*	*0*
B	*1*	*Alternative land use*	$0	0
	2	*Urban recycled water use*	$0	0
	3	*Financing of on-farm improvements*	$0	0
	4	*Incentive pricing*	$0	0
	5	*Line or pipe canals/install reservoirs*	$50000	0
	6	*Increase delivery flexibility*	$300000	0
	7	*District spill/tailwater recovery systems*	$0	0
	8	*Measure outflow*	*$0*	*0*
	9	*Optimize conjunctive use*	$50000	0
	10	*Automate canal structures*	$100000	0
	11	*Customer pump testing*	$0	0
	12	*Mapping*	$0	*0*
		Total	$555500	0

3. Projected budget summary for 2011.

BMP #		BMP Name	Budgeted Expenditure (not including staff time)	Staff Hours
A	*1*	*Measurement*	*$20000*	*0*
	2	*Conservation staff*	*$1000*	*0*
	3	*On-farm evaluations/water delivery info*	*$500*	*0*
		Irrigation Scheduling	*$1500*	*0*
		Water quality	*$30000*	*0*
		Agricultural Education Program	*$1500*	*0*
	4	*Quantity pricing*	*$0*	*0*
	5	*Policy changes*	*$1000*	*0*
	6	*Contractor's pumps*	*$0*	*0*

(continued)

BMP #		BMP Name	Budgeted Expenditure (not including staff time)	Staff Hours
B	*1*	*Alternative land use*	$0	0
	2	*Urban recycled water use*	$0	0
	3	*Financing of on-farm improvements*	$0	0
	4	*Incentive pricing*	$0	0
	5	*Line or pipe canals/install reservoirs*	$50000	0
	6	*Increase delivery flexibility*	$300000	0
	7	*District spill/tailwater recovery systems*	$0	0
	8	*Measure outflow*	*$0*	*0*
	9	*Optimize conjunctive use*	$50000	0
	10	*Automate canal structures*	$100000	0
	11	*Customer pump testing*	$0	0
	12	*Mapping*	$0	*0*
		Total	$555500	0

Section 4: Best Management Practices for Urban Contractors

(Due to the adoption of revised BMPs in December 2008, this section will be updated in Spring 2009.)

A. Urban BMPs

1. *Utilities Operations*
   - *1.1 Operations Practices*
   - *1.2 Pricing*
   - *1.3 Metering- District urban users are metered with 1" Turbo type meters. Meters are read twice per month, replaced as needed for damage, calibration and moisture issues.*
   - *1.4 Water Loss Control*

2. *Education*
   - *2.1 Public Information Programs*
   - *2.2 School Education*

3. *Residential*

4. *CII*

5. *Landscape*

B. Provide a 3-Year Budget for Expenditures and Staff Effort for BMPs

1. Amount actually spent during current year. 2009

Year 2010 BMP #	BMP Name	Projected Expenditures (not including staff hours)	Staff Hours
1.	Utilities Operations		
	1.1 Operations Practices	$0	0
	1.2 Pricing$0	0	
	1.3 Metering	$5000	0
	1.4 Water Loss Control	$0	0
2.	Education		
	2.1 Public Information Programs	$0	0
	2.2 School Education	$0	0
3.	Residential	$0	0
4.	CII	$0	0
5.	Landscape	$0	0
		Total-$5000	0

2. Projected budget summary for 2nd year.-2010

Year 2011 BMP #	BMP Name	Projected Expenditures (not including staff hours)	Staff Hours
1.	*Utilities Operations*		
	1.1 Operations Practices	*$0*	*0*
	1.2 Pricing	*$0*	*0*
	1.3 Metering	*$5000*	*0*
	1.4 Water Loss Control	*$0*	*0*
2.	*Education*		
	2.1 Public Information Programs	*$0*	*0*
	2.2 School Education	*$0*	*0*
3.	*Residential*	*$0*	*0*
4.	*CII*	*$0*	*0*
5.	*Landscape*	*$0*	*0*
		Total-$5000	*0*

3. Projected budget summary for 3rd year.-2011

Year 2012 BMP #	BMP Name	Projected Expenditures (not including staff hours)	Staff Hours
1.	Utilities Operations		
	1.1 Operations Practices	$0	0
	1.2 Pricing$0	0	
	1.3 Metering	$6000	0
	1.4 Water Loss Control	$0	0
2.	Education		
	2.1 Public Information Programs	$0	0
	2.2 School Education	$0	0
3.	Residential	$0	0
4.	CII	$0	0
5.	Landscape	$0	0
		Total-$6000	0

ATTACHMENT G

Groundwater Banking Plan

District does not require a Groundwater Banking Plan. No plans to bank any water within the District.

ATTACHMENT F

Groundwater Management Plan

District does not have a Groundwater Management Plan. Very few wells within District Boundary. 99% of water needs supplied by surface supply.

ATTACHMENT E

District Water Shortage Plan

(see Rules & Regulations; No. 3 (a)

LINDSAY-STRATHMORE IRRIGATION DISTRICT

P.O. Box 846, Lindsay, CA 93247
(559) 562-2581

WATER USAGE BILLING

BILLING PERIOD: 12/ 1/2009 - 12/31/2009

DUE DATE: 1/29/2010

ACCOUNT # 69500

TURNOUT	PREV READING	CURR READING	DATE	USAGE		RATE	TOTAL
	Beginning Balance						$107.25
	Payments and Adjustments						-$107.25
1328	376.30	377.60	12/14/2009	1.30	acft		
	December Irrigation	Irrigation Main Zone		1.30	acft	97.5000	$126.75
2828	65.50	66.00	12/14/2009	0.50	acft		
	December Irrigation	Irrigation Main Zone		0.50	acft	97.5000	$48.75
TOTALS:				**1.80**			**$175.50**

TOTAL BALANCE DUE: **$175.50**

PLEASE RETURN THE BOTTOM PORTION WITH YOUR REMITTANCE

BILLING PERIOD: 12/ 1/2009 - 12/31/2009

IRRIGATION

ACCOUNT # 69500
Edwards, Scott A.
AMOUNT DUE: **$175.50**
REMITTANCE AMT: _____

Check No. _____

REMIT TO:

LINDSAY-STRATHMORE IRRIGATION DISTRICT
P.O. BOX 846
LINDSAY, CA 93247

RULES AND REGULATIONS

Governing the Distribution of Water in the

Lindsay-Strathmore Irrigation District

Rules and regulations governing the distribution of water in the Lindsay-Strathmore Irrigation District were adopted by the Board of Directors under authority of the provisions of Section 15 of the Irrigation Act of 1897, which reads as follows:

> "It shall be the duty of the said Boatd to establish equitable bylaws, rules and regulations for the distribution and use of water among the owners of said lands, which must be printed in convenient form for distribution in the District. Said Board shall have power generally to perform all such acts as shall be necessary to fully carry out the purposes of this act."

RULES AND REGULATIONS of the LINDSAY-STRATHMORE IRRIGATION DISTRICT

No.1: CONTROL OF SYSTEM

The distribution system and works of the District are under the exclusive management and control of the Manager, appointed by the Board of Directors, and no other person shall have any right to interfere with said distribution system and works in any manner.

No.2: WATERTENDERS AND OTHER EMPLOYEES

The Manager shall employ such operators; watertenders and other assistants as may be necessary for the purpose of the proper operation of the system and distribution of water. Each water tender shall have charge of his respective area and shall be responsible to the Manager for said area. From the watertenders decisions an appeal may be made to the Manager. From the action of the Manager, appeal may be made to the Board of Directors.

No. 3(a): APPORTIONMENT OF IRRIGATION WATER

Irrigation water shall be apportioned within the District, in the event of shortage, to only those lands which are served by irrigation meters. It shall be apportioned on the basis of the ratio of the landowner's last assessment against his land for District purposes to the whole sum assessed to those lands served by irrigation meters. The District's assessment books will be the sole and final source for the computation of these assessments.

No. 3(b): APPORTIONMENT OF DOMESTIC WATER

In the event that apportionment of domestic water is inevitable, such apportionment shall be based on limiting monthly use to each domestic meter in the ratio of each parcel's last assessment to the whole of those parcels served by domestic meters only.

No.4: MEASUREMENT OF WATER

Water will be delivered to landowners through a meter only, either installed by the District at the expense of the landowner, or installed in accordance with the specifications for such work as set forth and in effect by the District.

No.5: CONTROL OF DIVERTING GATE VALVES, LOCKS, LOCK CHAINS, AND METERS

The District's employees alone will be allowed to unlock or otherwise remove a lock chain from the diverting gate valve. Tampering with a diverting valve, lock, lock chain, or meter is strictly prohibited. Any landowner deviating from this rule will be subject to a charge based on the usage through the meter since the last lock-up, plus 50%, or, at the discretion of the Board, be required at the landowner's expense to render his meter entirely inaccessible to any but the District's employees.

No.6: WASTE OF WATER

Persons wasting water on roads or vacant land, or land previously irrigated

either willfully, carelessly, or on account of defective or inadequate ditches or pipelines, or inadequately prepared land, will be refused the use of water until such conditions are remedied.

No.7: LIABILITY OF LANDOWNERS

Attention is called to the fact that any person draining water upon or permitting water to drain upon a public highway is liable to fine and damages. The District will not be liable for any damages resulting directly or indirectly from any private pipeline or ditch or the water flowing therein, and the District's responsibility shall absolutely cease when the water is turned therein according ot these rules and regulations.

Any interference with the distribution system or works of the District is a penal offense.

It shall be the duty of the landowner to furnish sufficient protection for meters and gate valves to prevent damage to said meter. In the event protection is not adequate, any expense of repair will be forne by ~he landowner.

No.8: UNLAWFUL ACTS

Every consumer of water shall be responsible to the District for damage oecuring to a meter or other equipment or property owned or maintained by the District causeJ by acts of the landowner or his tenanr, or employee, including the breaking or destruction of locks on or near a meter. Such repairs shall be made by the District at the expense of the landowner and will include material, labor, and administrative fees.

No. 9(a): ORDERING IRRIGATION WATER

Orders for irrigation water turn-on~ must be placed at the District office at least twenty-four (24) hours in advance of delivery. Orders for delivery of irrigation water will be taken at the District office until 4:00 P.M., Monday through Friday. Meters will be unlocked the day following ordering on at the earliest time manageable by the watertender. Orders for turn-ons on Saturday, Sunday, or Monday must be made to the District office by 4:00 P.M. Friday. Orders for "early" turn-ons must be made to the District office by 12:00 P.M., Monday through Friday.

Unauthorized turn-on and usage shall constitute an infraction of this rule and such usage shall be charged on the same basis as other continuous flow users at the rate then in effect for continuous flow users.

No. 9(b): ORDERING DOMESTIC WATER

Orders for domestic water .turn-ons may be made at the District office by either the landowner or a tenant. However, if water is ordered turned on by a tenant, only the tenant may order the water turned off in the absence of a written agreement between the landowner and the tenant, delivered to the District, giving the landowner the right to order the turn-off.

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No. 10: IRRIGATION WATER TURN-OFFS

Orders for turn-offs must be reported to the District office in advance of said turn-off. Failure to give such notice shall constitute an unauthorized use and penalty will apply.

No. 11: EMERGENCY TURN-OFFS

In the event of an emergency turn-off, a note must be left under the meter cap and the District office notified as soon as possible thereafter of such turn-off.

No. 12: INTERRUPTIONS IN SERVICE

The District shall not be liable for damage which may result from an interruption in service from a cause beyond the control of the District. Temporary shut-downs may be made by the District to make improvements and repairs. Whenever possible and as time permits all landowners will be notified prior to making such shut-downs.

No. 13: RIGHT OF ACCESS TO PREMISES OF LANDOWNER

The District or its duly authorized agents shall have at all reasonable times the right to ingress and egress from the landowner's premises for all purpqses properly connected with the service of water to the landowner.

No. 14: ABATEMF.NT OF NUISANCE

No rubbish, swill, garbage, or refuse shall be placed in or allowed to be emptied into any works of the District, and the Manager and water tenders of the District are hereby instructed to see that this rule is strictly enforced. Any persons found guilty of violating the above rule will be prosecuted for maintaining a nuisance.

No. 15(a) PAYMENT OF IRRIGATION BILLS

Regular monthly irrigation water bills are due and payable on presentation and payment may be made at the District office. Bills will be considered delinquent and a penalty of one per cent (1%) per month added thereto if payment is not made on or before the 15th day of the month following service period. Service will be discontinued for non-payment if bill is not paid
on or before the 20th day of the month following service period.

When meters have been installed by the District at the expense of the landowner, the entire cost of such installation must be paid in full, or monthly payments as approved by the Board of Directors must be on a current status, before delivery of water will be made.

No. 15(b): PAYMENTS OF DOMESTIC BILLS

Domestic water bills will be sent every two months and are due and payable on presentation. Domestic bills will be considered delinquent and a penalty of five per cent (5%) added thereto if payment is not made on or before
the 15th day of the month following the date of presentation. An additional five per cent (5%) penalty will be added if payment is not made on or before
the 15th day of the third month following presentation. Service will be discontinued on all domestic water services if the bill remains delinquent for a period of sixty (60) days. If water service is resumed after discontiuance for delinquency, there will be a $5.00 turn-on charge during business hours and a $12.00 turn-on charge after hours, both payable in advance.

No. 16: DELINQUENT TAXES

No water shall be furnished to any land within the District, from the irrigation system thereof, if any District taxes are delinquent thereon.

No. 17: DELIVERIES SUBJECT TO TERMS OF U.S. WATER CONTRACT

All water deliveries shall be subject to the terms and conditions 01 (lilY existing Water Service Contracts between the United States and uic 1.llldsayStrathmore Irrigation District.

No. 18: DELIVERIES SUBJECT TO SUPERIOR COURT JUDGEMENT NO. 8807

All water deliveries shall be subject to the terms, condi tl oua , 111II11111"ions and restrictions contained in the judgment entered on Dec embo r IH. 1936,
by the Superior Court of the State of California. in and 10" I I", (lounty
of Tulare, in the action then pending and entitled "Tulnre' II r l gu rl un District, et a l ,
plaintiffs, vs. Lindsay-Strathmore Lr r Lgat I ou I)lfll, lei. defendant" and numbered 8807 on the records and files of that, CC1IlI'1 .

No, 19: ENFORCEMENT OF RULES

Refusal to comply with the requirements hereoC, or Lf£lnAKrClIIlIloll 01 lilly of . the foregoing rules and regulations, or any lnterference w l th I I". II I "charge of the duties of any official, shall

be sul't:lcJ.ent CflUfJ(1 for 1111111 I II'I~ off the water, and water will not again be furn.Lshed un tl l rull (,Olllpllllnr(' has
been made with all requirements herein set forth. 1

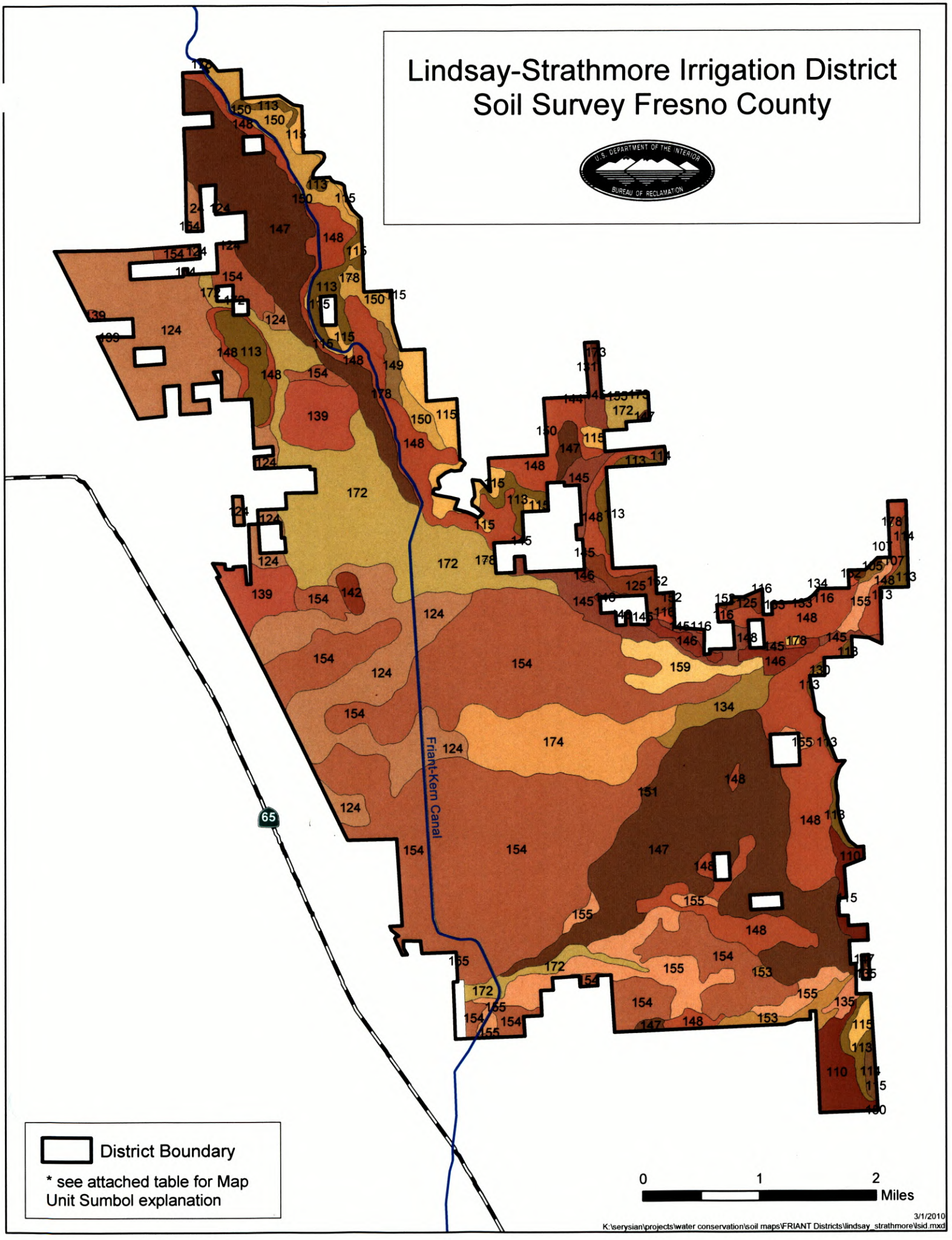
No. 20: INTRODUCTION OF HARMFUL OR .EXTRANEOUS MATERlAL IN'I'O '1'111': WA'I'1m DISTRIBUTION SYSTEM

No person or persons shall insert or introduce any substance or 11I111 or io t, liquid or solid, into the water system of the District. No person or persons shall insert or introduce any substance or material, liquid or so I I d, Into the private water system or lines of a customer without providing Lila proper cross-connection control device as called for by Title 17 of the Cal 1- fornia Administrative Code, Section 7604, between the District water system and systems or lines carrying the altered water supply.

No person or persons shall fill any tank, container or spray rig with water from the District system or from any consumer's system without providing the proper cross-connection control device as called for by Title 17 of the California Administrative Code, Section 7604, between the discharge and the opening in the tank, container or spray rig.

No restrictions contained in this section (Section 20) of the Rules and gegulations of the District shall apply to the introduction of materials into the Districts' facilities by employees of the District for District purposes, or to the installation of water softening devices on the lines of either the District or the water consumers.

Lindsay-Strathmore Irrigation District
Soil Survey Fresno County



Lindsay Strathmore Irrigation District - Soil Survey Explanation, Tulare County, Central Portion			
Map Unit Symbol	**Count**	**Sum_Acres**	**Map Unit Name**
105	1	9.96	BLASINGAME SANDY LOAM, 9 TO 15 PERCENT SLOPES
107	2	3.03	BLASINGAME SANDY LOAM, 30 TO 50 PERCENT SLOPES
110	3	228.35	CENTERVILLE CLAY, 2 TO 9 PERCENT SLOPES
113	14	506.30	CIBO CLAY, 15 TO 30 PERCENT SLOPES
114	4	45.64	CIBO CLAY, 30 TO 50 PERCENT SLOPES
115	17	346.28	CIBO-ROCK OUTCROP COMPLEX, 15 TO 50 PERCENT SLOPES
116	6	20.02	CIENEBA-ROCK OUTCROP COMPLEX, 15 TO 75 PERCENT SLOPES
124	15	1,855.63	EXETER LOAM, 0 TO 2 PERCENT SLOPES
125	2	108.49	EXETER LOAM, 2 TO 9 PERCENT SLOPES
130	1	3.56	FRIANT-ROCK OUTCROP COMPLEX, 15 TO 75 PERCENT SLOPES
131	2	1.44	GRANGEVILLE SILT LOAM, DRAINED
133	3	3.38	GREENFIELD SANDY LOAM, 2 TO 5 PERCENT SLOPES
134	2	140.97	HAVALA LOAM, 0 TO 2 PERCENT SLOPES
135	2	35.71	HAVALA LOAM, 2 TO 5 PERCENT SLOPES
139	4	398.85	HONCUT SANDY LOAM, 0 TO 2 PERCENT SLOPES
142	1	37.51	LAS POSAS LOAM, 15 TO 30 PERCENT SLOPES
144	1	0.83	LAS POSAS-ROCK OUTCROP COMPLEX, 9 TO 50 PERCENT SLOPES
145	9	354.01	LEWIS CLAY LOAM
146	5	112.47	PITS
147	6	2,454.50	PORTERVILLE CLAY, 0 TO 2 PERCENT SLOPES
148	16	1,912.95	PORTERVILLE CLAY, 2 TO 9 PERCENT SLOPES
149	1	46.64	PORTERVILLE CLAY, 9 TO 15 PERCENT SLOPES
150	8	307.59	PORTERVILLE COBBLY CLAY, 2 TO 15 PERCENT SLOPES
151	1	2.40	RIVERWASH
152	5	19.42	ROCK OUTCROP
153	2	91.38	SAN EMIGDIO LOAM
154	16	4,370.97	SAN JOAQUIN LOAM, 0 TO 2 PERCENT SLOPES
155	10	545.94	SAN JOAQUIN LOAM, 2 TO 9 PERCENT SLOPES
159	1	161.42	SEVILLE CLAY
172	7	1,306.30	WYMAN LOAM, 0 TO 2 PERCENT SLOPES
173	2	8.53	WYMAN LOAM, 2 TO 5 PERCENT SLOPES
174	1	557.83	WYMAN GRAVELLY LOAM, 0 TO 2 PERCENT SLOPES
178	7	67.25	WATER

Lindsay-Strathmore Irrigation District

Friant-Kern Canal

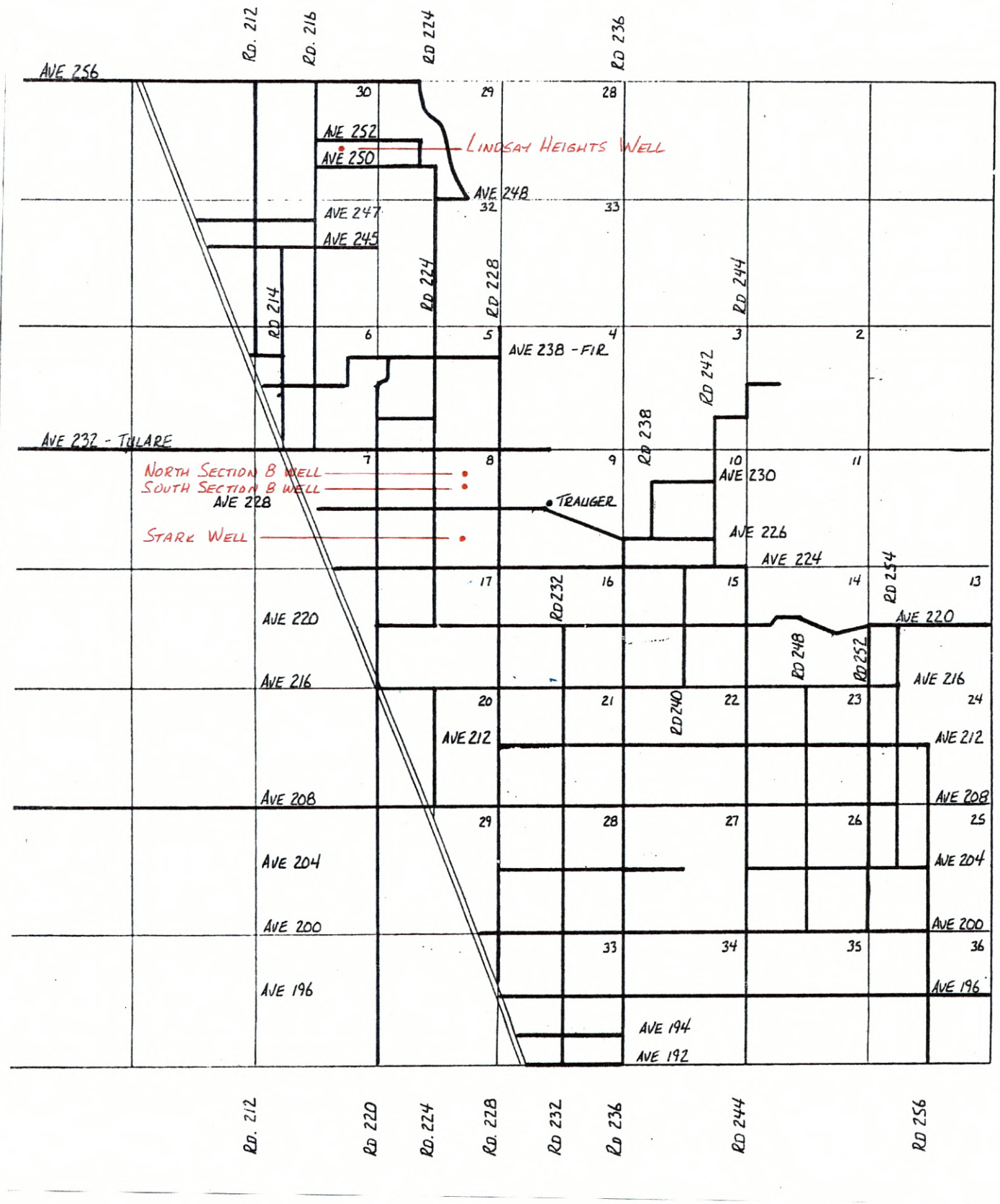
65

District Boundary

0 1 2 Miles

3/1/2010
K:\mhiggins\projects\districts\lsid.mxd

LINDSAY-STRATHMORE IRRIGATION DISTRICT



ATTACHMENT H

Water Order Form

District does not require landowners to fill out a order form, rather they are asked to call, fax or visit the District Office to place water orders, 24 hours in advance. Order is taken by office staff and inserted directly into District computer system.

Table 31. Results Summary
Friant-Kern Canal at Millerton Road

		RESULT[1]*		WATER QUALITY		NUMBER OF ANALYSES*		
ANALYTE	UNITS	MIN	MAX	LIMIT (WQL)[+]	OBJECTIVE**	TOTAL	WITHIN WQL	OUTSIDE WQL
ALKALINITY	mg/l	8	23	20	AWQ-CC	18	1	17
ALUMINUM	ug/l	4.2	120	87	AWQ-CC	15	14	1
AMMONIA AS N	mg/l	0.05	0.11	varies	AWQ-pHTCC	15	15	
ANTIMONY	ug/l	0.5	2.5	5.6	AWQ-HH	17	17	
ARSENIC	ug/l	1	5	10	CA-PMCL	17	17	
BARIUM	ug/l	4.2	20	1000	CA-PMCL	16	16	
BERYLLIUM	ug/l	0.5	1	4	CA-PMCL	15	15	
BICARBONATE	mg/l	10	28	-	-	12	-	
BORON	ug/l	10	100	700	AG	16	16	
CALCIUM	mg/l	1.6	4	-	-	17	-	
CARBONATE	mg/l	5	5	-	-	12	-	
CHLORIDE	mg/l	0.56	3	106	AG	18	18	
CHROMIUM	ug/l	0.5	5	varies	AWQ-HDCC	16	16	
COD	mg/l	5	10	-	-	18	-	
COPPER	ug/l	0.5	3.7	1.7	CTR-HDCC	11	10	1
CRYPTOSPORIDIUM	org/l	0.1	0.2	-	-	4	-	
CYANIDE	ug/l	1	5	5.2	AWQ-CC	14	14	
DISSOLVED OXYGEN	mg/l	6.8	11.8	-	-	15	-	
E.COLI	MPN/100ml	2	30	126	REC-1 BP	17	17	
EC	uS/cm	14	319	700	AG	18	18	
FECAL COLIFORM	MPN/100ml	2	30	200	REC-1 BP	17	17	
FLUORIDE	mg/l	0.04	0.2	1	AG	18	18	
GIARDIA	org/l	0.1	0.2	-	-	4	-	
GROSS ALPHA	pCi/l	1.2	3	15	CA-PMCL	18	18	
HYDROXIDE	mg/l	5	5	-	-	1	-	
IRON	ug/l	10	190	300	CA-SMCL	16	16	
LEAD	ug/l	0.9	0.9	varies	CTR-HDCC	1	0	1
MAGNESIUM	mg/l	0.31	1	-	-	17	-	
MANGANESE	ug/l	0.6	29	50	CA-SMCL	16	16	
MERCURY	ng/l	0.81	6.2	50	CTR-HH	18	18	
MOLYBDENUM	ug/l	0.6	10	10	AG	16	16	
NICKEL	ug/l	1	5	varies	CTR-HDCC	14	14	
Nitrate + Nitrite (as N)	mg/l	0.05	0.16	10	CA-PMCL	18	18	
pH	units	6.79	8.2	6.5-8.4	AG	18	18	
PHOSPHORUS, TOTAL AS P	mg/l	0.01	0.05	-	-	18	-	
POTASSIUM	mg/l	0.71	1	-	-	17	-	
SELENIUM	ug/l	0.4	0.4	5	BP	18	18	
SODIUM	mg/l	1	4	69	AG	17	17	
SULFATE	mg/l	0.44	5	250	CA-SMCL	18	18	
TDS	mg/l	10	43	450	AG	17	17	
TEMPERATURE	C	12.2	23.1	-	-	15	-	
TOC	mg/l	1.3	2.9	-	-	18	-	
TOTAL COLIFORM	MPN/100ml	2	500	-	-	17	-	
TURBIDITY	NTU	0.6	8	-	-	18	-	
URANIUM	ug/l	0.14	10	20	CA-PMCL	16	16	
ZINC	ug/l	2	10	varies	CTR-HDCC	15	15	

1 Shown as absolute; less-than and greater-than symbols are omitted. For true results, see Appendix B
* With the exception of alkalinity, if reporting limit exceeds WQ limit, non-detect results are excluded
[+] Alkalinity limit is a minimum, pH a range, others indicate maximum acceptable concentrat
** Acronyms are explained in Table 5

Data Source: Reclamation, June 209. Baseline Water Quality Report for the Central Valley Project 1996 - 2008.

Table 33. Results Summary

Friant-Kern Canal at Woollomes Road

		RESULT[1]*		WATER QUALITY		NUMBER OF ANALYSES*		
ANALYTE	UNITS	MIN	MAX	LIMIT (WQL)+	OBJECTIVE**	TOTAL	WITHIN WQL	OUTSIDE WQL
1,1,1,2-TETRACHLOROETHAN	ug/l	0.5	0.5	-	-	19	-	
ALKALINITY	mg/l	5.6	16	20	AWQ-CC	19	0	19
ALUMINUM	ug/l	7.2	63	87	AWQ-CC	16	16	
ANTIMONY	ug/l	0.5	2.5	5.6	AWQ-HH	18	18	
ARSENIC	ug/l	1	5	10	CA-PMCL	18	18	
BARIUM	ug/l	4.6	21	1000	CA-PMCL	17	17	
BERYLLIUM	ug/l	0.5	1	4	CA-PMCL	16	16	
BICARBONATE	mg/l	11	20	-	-	12	-	
BORON	ug/l	12	100	700	AG	17	17	
CADMIUM	ug/l	-	-	varies	AWQ-HDCC	0	0	
CALCIUM	mg/l	1.7	4	-	-	18	-	
CHROMIUM	ug/l	0.5	5	varies	AWQ-HDCC	17	17	
COD	mg/l	5	10	-	-	19	-	
COPPER	ug/l	0.8	8.5	varies	CTR-HDCC	12	3	9
CRYPTOSPORIDIUM	org/l	0.1	0.1	-	-	17	-	
CYANIDE	ug/l	1	5	5.2	AWQ-CC	15	15	
DISSOLVED OXYGEN	mg/l	6.1	25.6	-	-	15	-	
E.COLI	MPN/100ml	50	240	126	REC-1 BP	17	16	1
EC	uS/cm	54	81	700	AG	18	18	
FECAL COLIFORM	MPN/100ml	50	240	200	REC-1 BP	17	16	1
FLUORIDE	mg/l	0.04	0.2	1	AG	19	19	
GIARDIA	org/l	0.1	0.1	-	-	17	-	
GROSS ALPHA	pCi/l	1	3	15	CA-PMCL	19	19	
HYDROXIDE	mg/l	5	5	-	-	1	-	
IRON	ug/l	140	140	300	CA-SMCL	17	17	
LEAD	ug/l	0.9	0.9	0.282966	CTR-HDCC	1	0	1
MAGNESIUM	mg/l	1	1	-	-	18	-	
MANGANESE	ug/l	5	5	50	CA-SMCL	17	17	
MERCURY	ng/l	2.5	6.8	50	CTR-HH	19	19	
MOLYBDENUM	ug/l	1	10	10	AG	17	17	
NICKEL	ug/l	5	5	9.917485	CTR-HDCC	15	15	
NITRATE + NITRITE (AS N)	mg/l	0.16	0.16	10	CA-PMCL	19	19	
NORFLURAZON	ug/l	0.4	0.4	-	-	3	-	
pH	units	6.2	8.6	6.5-8.4	AG	18	13	5
PHOSPHORUS, TOTAL AS P	mg/l	0.05	0.05	-	-	19	-	
POTASSIUM	mg/l	1	1	-	-	18	-	
SELENIUM	ug/l	0.4	0.4	5	BP	19	19	
SODIUM	mg/l	5	5	69	AG	18	18	
SULFATE	mg/l	1.4	5	250	CA-SMCL	19	19	
TDS	mg/l	10	42	450	AG	18	18	
TEMPERATURE	C	12.1	27.4	-	-	15	-	
TOC	mg/l	2.5	3.3	-	-	19	-	
TOTAL COLIFORM	MPN/100ml	90	1600	-	-	17	-	
TURBIDITY	NTU	1.3	7	-	-	18	-	
URANIUM	ug/l	1	10	20	CA-PMCL	17	17	
ZINC	ug/l	10	10	varies	CTR-HDCC	15	15	

1 Shown as absolute; less-than and greater-than symbols are omitted. For true results, see Appendix B

* With the exception of alkalinity, if reporting limit exceeds WQ limit, non-detect results are excluded

+ Alkalinity limit is a minimum, pH a range, others indicate maximum acceptable concentration

** Acronyms are explained in Table 5

Table 35. Results Summary
Friant-Kern Canal at Pond Road

		RESULT[1]*		WATER QUALITY		NUMBER OF ANALYSES*		
ANALYTE	UNITS	MIN	MAX	LIMIT (WQL)+	OBJECTIVE**	TOTAL	WITHIN WQL	OUTSIDE WQL
ALKALINITY	mg/l	3	15	20	AWQ-CC	3	0	3
ALUMINUM	ug/l	6.8	230	87	AWQ-CC	14	11	3
AMMONIA (AS N)	mg/l	0.05	0.34	varies	AWQ-pHTCC	18	18	
ANTIMONY	ug/l	0.5	2.1	5.6	AWQ-HH	18	18	
ARSENIC	ug/l	1	2.2	10	CA-PMCL	18	18	
BARIUM	ug/l	6.6	20	1000	CA-PMCL	18	18	
BERYLLIUM	ug/l	0.5	2	4	CA-PMCL	17	17	
BICARBONATE	mg/l	18	18	-	-	1	-	
BORON	ug/l	10	100	700	AG	18	18	
CALCIUM	mg/l	2	4.1	-	-	18	-	
CHLORIDE	mg/l	1	18	106	AG	18	18	
CHROMIUM	ug/l	0.3	10	varies	AWQ-HDCC	18	18	
COD	mg/l	3	50	-	-	18	-	
COPPER	ug/l	0.3	8.6	varies	CTR-HDCC	17	1	16
CRYPTOSPORIDIUM	org/l	0.1	0.1	-	-	2	-	
CYANIDE	ug/l	3	3	5.2	AWQ-CC	2	2	
E.COLI	MPN/100ml	2	50	126	REC-1 BP	8	8	
EC	uS/cm	32	64	700	AG	17	17	
FECAL COLIFORM	MPN/100ml	2	110	200	REC-1 BP	13	13	
FLUORIDE	mg/l	0.05	1	1	AG	15	15	
GIARDIA	org/l	0.1	-	-	-	3	-	
GROSS ALPHA	pCi/l	0.378	2	15	CA-PMCL	18	18	
IRON	ug/l	10	250	300	CA-SMCL	18	18	
LEAD	ug/l	0.12	0.38	varies	CTR-HDCC	3	2	1
MAGNESIUM	mg/l	0.45	5	-	-	18	-	
MANGANESE	ug/l	0.8	58	50	CA-SMCL	18	17	1
MERCURY	ng/l	0.7	10	50	CTR-HH	18	18	
MOLYBDENUM	ug/l	1	1.9	10	AG	17	17	
NICKEL	ug/l	1	1	varies	CTR-HDCC	11	11	
NITRATE + NITRITE (AS N)	mg/l	0.01	0.44	10	CA-PMCL	18	18	
pH	units	6.5	9.1	6.5-8.4	AG	17	11	6
PHOSPHORUS, TOTAL AS P	mg/l	0.01	0.2	-	-	18	-	
POTASSIUM	mg/l	0.1	1	-	-	18	-	
SELENIUM	ug/l	0.4	0.4	5	BP	18	18	
SODIUM	mg/l	2	5	69	AG	18	18	
SULFATE	mg/l	0.74	20	250	CA-SMCL	18	18	
TDS	mg/l	15	82	450	AG	18	18	
TEMPERATURE	C	12.8	25	-	-	13	-	
THALLIUM	ug/l	0.1	0.1	0.24	AWQ-HH	3	3	
TOC	mg/l	2	2.5	-	-	2	-	
TOTAL COLIFORM	MPN/100ml	11	900	-	-	13	-	
TURBIDITY	NTU	0.9	16	-	-	17	-	
URANIUM	ug/l	0.1	5	20	CA-PMCL	18	18	
ZINC	ug/l	1	23	varies	CTR-HDCC	12	12	

Welcome Back david

My Reports
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Account Management

Log Off
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Change Password

Station Detail Report

The **Station Detail Report** provides detailed information on CIMIS stations including the region in which they are located, nearby city, installation dates, termination dates (if inactive), geographic locations (latitude and longitude), elevations above see level, zip codes, surface types (grass or alfalfa), station site descriptions, and photographs of the stations.

Lindcove #86

San Joaquin Valley Region Tulare County San Joaquin District
Nearby city is Lindcove

- Activated On May 31, 1989
- Station is Active
- ETo Reported
- Reference Surface is Grass
- Datalogger is CR21x

Station Picture Unavailable

Station 86
North | South | East | West |

Geographic Information

Elevation (ft):	480
Latitude:	36°21'26"N / 36.36
Longitude:	119°03'31"W / -119.06

Associated Zip Codes

93221, 93286

Station Siting Description

DATE: 11-12-02

STATION#:86
STATION NAME: Lindcove
ETO ZONE: 12
PREVAILING WINDS: NW
LOCAL CHARACTER: Agricultural activities predominate in the region. Primary operations include Valencia and navel oranges and other citrus, grapes and cow/calf ranches.

DESCRIPTION OF STATION SITE:
Located on a University of California citrus research facility. The station has been installed on a small plot of grass.

NORTH:
50ft: Irrigated grass
50-100+ ft: Bare soil

EAST:
50ft: Irrigated grass
50-500+ ft: Citrus grove

SOUTH:
50ft: Irrigated grass
50-300+ ft Bare soil

CIMIS (California Irrigation Management Information System)

Monthly Report

Rendered in ENGLISH Units.
April 1, 2009 - March 31, 2010
Printed on April 12, 2010
See the bottom of this report for a legend for all flag values.

San Joaquin Valley - Lindcove - #86

Month Year	Tot ETo (in)	Tot Precip (in)	Avg Sol Rad (Ly/Day)	Avg Vap Pres (mBars)	Avg Max Air Tmp (F)	Avg Min Air Tmp (F)	Avg Air Tmp (F)	Avg Max Rel Hum (%)	Avg Min Rel Hum (%)	Avg Rel Hum (%)	Avg Dew Point (F)	Avg Wind Speed (mph)	Avg Soil Temp (F)
Apr 2009	5.35	0.66 K	548 K	9.3 K	75.2 K	44.4 K	60.4	85	29	52 K	42.1 K	3.3 K	66.5
May 2009	7.48	0.43 K	632 K	13.3	88.9 K	56.4 K	74.0	79	28	47	51.9	3.6 K	74.0
Jun 2009	7.59	0.00 K	662	13.5	88.4	59.8 K	74.9	75	28	47	52.4	3.7 K	76.2
Jul 2009	8.89	0.00 K	708	15.6	99.6 K	64.7 K	83.0	74	21	40	56.2	3.4 K	79.2
Aug 2009	7.49	0.00 K	607	15.0	95.6 K	62.2	79.2	76	24	44	55.3	3.2 K	79.0
Sep 2009	5.67	0.00 K	488 K	14.5 K	93.3 K	60.7 K	76.2 K	77 K	26 K	47 K	54.2 K	2.9 K	78.2
Oct 2009	3.32	1.04 K	357	12.1 K	74.9 K	47.6 K	60.8	88	42	63 K	46.8 K	2.6 K	70.0
Nov 2009	1.92 K	0.27 K	251 K	9.9 K	67.2 K	40.2	52.2 K	96 K	48 K	75	44.1	2.2 K	63.2 K
Dec 2009	1.10 K	2.18 K	177 K	8.9 K	56.7	36.4	45.6 K	98 K	62 K	84	41.1	2.4 K	56.8 K
Jan 2010	1.08	3.02	162	9.7	57.5	39.4	47.6	98	67	86	43.6	2.7 K	57.1 K
Feb 2010	1.34	3.61	221 K	11.3	60.8	42.5	51.5	98	67	87	47.6	2.4 K	59.6
Mar 2010	3.55	0.81	412 K	10.4	67.7	41.8	54.4	95	44	72	45.2	2.8 K	62.5
Totals/Avgs	54.78	12.02	435	12.0	77.2	49.7	63.3	87	40	62	48.4	2.9	68.5

M - All Daily Values Missing
J - One or More Daily Values Missing
K - One or More Daily Values Flagged
L - Missing and Flagged Daily Values

W/sq.m = Ly/day/2.065	inches * 25.4 = mm	C = 5/9 * (F - 32)
m/s = mph * 0.447	kPa = mBars * 0.1	

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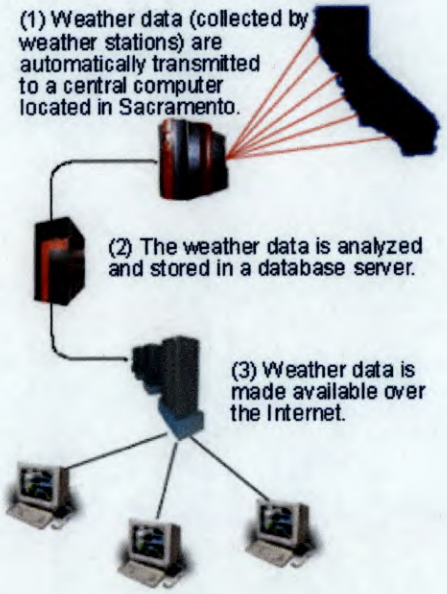
CIMIS Overview

printer friendly version

The California Irrigation Management Information System (CIMIS) is a program of the Office of Water Use Efficiency (OWUE), California Department of Water Resources (DWR) that manages a network of over 120 automated weather stations in the state of California. CIMIS was developed in 1982 by DWR and the University of California, Davis to assist irrigators in managing their water resources efficiently. Efficient use of water resources benefits Californians by saving water, energy, and money.



Data Collection and Transmission

CIMIS weather stations collect weather data on a minute-by-minute basis, calculate hourly and daily values and store them in the dataloggers. A computer at the DWR headquarters in Sacramento calls every station starting at midnight Pacific Standard Time (PST) and retrieves each day's data.

In case of a communication problem between the central computer and a given station, the computer skips that station and calls the next station. After all other stations have reported the polling computer comes back to the station with a communication problem trying to establish a connection at predetermined time intervals. The interrogation continues into the next day until all of the station data have been transmitted.

Data Processing

Once the data is transmitted, the central computer analyzes it for quality, calculates reference evapotranspiration (ETo - for grass reference and ETr - for alfalfa) and other intermediate parameters, flags the data (if necessary), and stores them in the CIMIS database. Evapotranspiration (ET) is a loss of water to the atmosphere by the combined processes of evaporation from soil and plant surfaces and transpiration from plants. Reference evapotranspiration is the loss of water from standardized grass or alfalfa surfaces over which the stations are sitting. Irrigators have to use crop factors, known as crop coefficients, to convert ETo/ETr into an actual evapotranspiration (ETc) by a specific plant.

Since most of the CIMIS stations are sitting on standardized grass surfaces, reference evapotranspiration is commonly referred to as "ETo" in this web site. However, it is worth mentioning that a few CIMIS stations are sited on standardized alfalfa surfaces and therefore evapotranspiration from such surfaces is referred to as ETr.

Data Retrieval

Estimated parameters (such as ETo, net radiation (Rn), dew point temperature, etc.) and measured parameters (such as solar radiation (Rs), air temperature (T), relative humidity (RH), wind speed (u), etc.) are stored in the CIMIS database for unlimited free access by registered CIMIS data users. In the past, users were accessing the CIMIS database via the dial-up and telnet systems. CIMIS then developed an older version of its current web site, during which time users were able to access the database using the dial-up, telnet, and/or the web systems. Once the web site became fully functional, the dialup and telnet options were terminated. Currently, the web system is the only platform for retrieving the CIMIS data. In addition to the web, CIMIS developed an ftp site for those interested in automated access of the data. However, the ftp site only provides daily data for the previous 7 days and monthly data for the previous 12 months. Also available at the ftp site is one year's worth of rolling daily ETo data. This means that the beginning and ending dates of this data advance forward by one day everyday.

Selecting Representative Stations

The CIMIS weather stations are randomly distributed throughout the State of California. It is very important that the selected station represents the same microclimate as the area of interest. Some resources available to assist you in this regard include the CIMIS web site, local water districts, farm advisors, consultants, and CIMIS staff.

Contact information for CIMIS staff at the Sacramento headquarters and the DWR districts are provided in the CIMIS Staff link on the Home Page. Questions regarding the selection of a CIMIS station, installation of new station, missing data, and/or information on how to use the data can be directed to the CIMIS staff in your DWR district. There are four DWR districts in California. To find out in which district your County lies, click here, for

district location maps. If you have problems contacting the CIMIS staff in your district, you can Contact Us at headquarters in Sacramento.

Trends in CIMIS Data Users

Although CIMIS was initially designed to help agricultural growers and turf managers administering parks, golf courses and other landscapes to develop water budgets for determining when to irrigate and how much water to apply, the user base has expanded over the years. In addition to those mentioned above, current CIMIS data users include local water agencies, fire fighters, air control board, pest control managers, university researchers, school teachers and students, construction engineers, consultants, hydrologists, state and federal agencies, utilities, lawyers, weather agencies, and many more.

The number of registered CIMIS data users has also been growing steadily over the years. Currently, there are over 6000 registered CIMIS data users. It is worth mentioning here that this number reflects only those that are primary users of the CIMIS data. It has been established that many users get the CIMIS data from these primary users for various uses. Examples include local water districts and consultants providing the CIMIS data to their clients. Therefore, there are secondary and tertiary CIMIS data users that have not been accounted for by the figure presented here.

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Location Maps

Location Maps provides a map of California with the four California Department of Water Resources (DWR) Districts. Clicking on any one of the four Districts takes the user to a detailed map of the District. By clicking on individual stations detailed station information will be provided.

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Woolley, David L

From: Bushard, George K
Sent: Monday, April 26, 2010 8:46 AM
To: Woolley, David L
Subject: Lindsay-Strathmore ID - transfers to Strathmore PUD (M&I) by contract year

2009 = 509 a.f.
2008 = 475 a.f.
2007 = 386 a.f.
2006 = 453 a.f.
2005 = 397 a.f.
2004 = 376 a.f.
2003 = 418 a.f.
2002 = 496 a.f.

This is what I had close by. I don't think the yearly totals are all for LSID. There M&I use is part of the total.

George K. Bushard
Contract Repayment Specialist
South-Central California Area Office (SCCAO)
Bureau of Reclamation
Phone: (559) 487-5121
Fax: (559) 487-5397

Date Printed: 4/5/2010

Lindsay-Strathmore Irrigation District

2010 Crop Report

Remarks: All

	Acres	Yield Per Acre	Yield Total	Value Per Unit	Total
Fruits					
Pummelo	29.11				
Apricots	3.00				
Berries(all kinds)	0.25				
Cherries	50.77				
Grapefruit	69.64				
Lemons and Limes	203.68				
Oranges and tangerines	9,501.86				
Olives	1,193.00				
Peaches	1.00				
Pears	15.00				
Other fruits	1.00				
Non-Ag	1,111.58				
Fallow Crop Land	2,167.43				
Irrigated Pasture	253.09				
Vegetables	33.62				
Persimmons	48.61				
Plums	38.90				
Pomegranates	62.91				
Kiwis	49.00				
Home Garden/Yard	13.25				
Avocados	11.43				
Jujube	16.00				
Nursery	33.31				
Wheat	54.25				
Walnuts	38.22				
Pistachios	1.50				
Dry Pasture	91.64				
Christmas Trees	1.00				
Pumpkin	1.00				
Wine Grapes	28.00				
Total Acres:	**15,123.05**				

LINDSAY-STRATHMORE IRRIGATION DISTRICT
23260 ROUND VALLEY RD, PO BOX 846
LINDSAY, CA 93247
P(559)562-2581 F(559)562-3882

FACSIMILE TRANSMITTAL SHEET

TO: David Woolley	FROM: Emily Millan
COMPANY: Bureau of Reclamation	DATE: 4/5/10
FAX NUMBER: 559-487-5397	TOTAL NO. OF PAGES INCLUDING COVER: 2
PHONE NUMBER: 559-487-5049	SENDER'S REFERENCE NUMBER:
RE: Crop Report	YOUR REFERENCE NUMBER:

☐ URGENT ☑ FOR REVIEW ☐ PLEASE COMMENT ☐ PLEASE REPLY ☐ PLEASE RECYCLE

NOTES/COMMENTS: